

example "Summary of Invention" at page 8. Support for enriched populations of dendritic cell precursors in the presence of GM-CSF is also present in the specification which describes various methods of removing other cell types and promoting the proliferation of dendritic cell precursors. See, for example page 22, lines 2-27; page 25, line 19 – page 26, line 5.

Claim 101 has been added to specifically claim enriched populations of dendritic cell precursors which present pulsed antigen. Support for claim 101 is present in the specification which discloses, for example, culturing dendritic cell precursors with antigen for a sufficient time to allow cell to "phagocytose, process and present the antigen." Page 36, lines 16-29. See also, page 10, lines 13-23. The support for contacting the precursor with antigen in the presence of GM-CSF is in the specification at page 31, lines 25-32, and page 65, line 15, through page 66, line 1.

Claim 83 has been amended to depend from claim 101 wherein the dendritic cell precursors are derived from the enriched proliferating populations of claim 82.

Rejection Under 35 U.S.C. § 112

Claims 83-85, 89, 94-95 and 99 stand rejected under 35 U.S.C. 112, second paragraph.

The Examiner contends that claims 83-85, 89, 94-95 are "ambiguous and unclear in that they are drawn to 'dendritic cell precursors' which have been 'pulsed' with antigen" and which the Examiner further contends would no longer be precursors. Applicants disagree with the Examiner's contention as the specification clearly discloses contacting dendritic cell precursors with antigen so that the antigen could be

phagocytosed by the dendritic cell precursors, processed and presented. In addition, the specification discloses antigen containing tritium labeled dendritic cell precursors. See, page 34, lines 5-14. Applicants have added claim 101 to refer to antigen presenting dendritic cell precursors in the presence of GM-CSF. Claim 83 has been amended to depend from claim 101 and to recite that the precursors are derived from proliferating dendritic cell precursors. In view of these amendments and discussion, applicants request removal of this ground of rejection.

Claim 99 stands rejected because the Examiner contends the recitation of milligrams of antigen per dose is unclear because "it is unclear how many pulsed cells comprise a dose." Applicants traverse this ground of rejection. The claim is sufficiently clear to allow those skilled in the art to understand the metes and bounds of the claimed subject matter. Claim 99 refers to an amount of antigen applicants consider is preferred to obtain a desired immune response. The Examiner has not provided any basis to suggest that one skilled in the art would not be able to determine the amount of antigen present in an amount of cells and therefore a dose which would fall within the claimed range. Accordingly, applicants request withdrawal of this ground of rejection.

Rejection Under 35 U.S.C. § 102(b)

Claims 82-85, 89, 94-97 and 99 stand rejected under 35 U.S.C. § 102(b) because the Examiner contends Knight et al. "teaches the isolation of peripheral blood from animals which inherently contains dendritic cell precursors." The Examiner also contends that the "claims recite 'comprising,' which is an open term inclusive of any isolated sample comprising said dendritic cell precursors. The term isolated merely

indicates the removal of the sample comprising the dendritic cell precursors from the body and does not indicate any degree of purification."

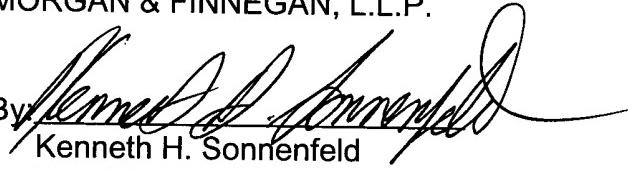
Applicants traverse this ground of rejection. However, applicants have amended claims 82 and have included in claim 101, a recitation that the dendritic cell precursors are in the presence of GM-CSF which is not disclosed by Knight et al. Claims 82 and 101 also refer to enriched populations of cells rather than "isolated" cells. In addition, claim 96 has been amended so that it relates to a pharmaceutical composition comprising therapeutically effective amounts of dendritic cells. Knight et al. refers to cultures of low density cells, a portion of which are stated to be dendritic cells. Knight et al. fails to disclose enriched populations of dendritic cells in a pharmaceutical carrier which could be used as a therapeutic. In view of these claim amendments, applicants respectfully request withdrawal of these grounds of rejection.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account 13-4500, Order No. 2016-4000US5. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,

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